

CLAIMS

We claim:

5 ~~7~~ Claim 2. The insulating wire separator apparatus of claim 21, wherein the insulating wire separator apparatus is made of a resilient, non-conductive, non-corrosive, non-biodegradable material.

10 Claim 3. The insulating wire separator apparatus of claim 21, wherein a separator post extends at right angles from said arm portion, said separator post spaced at least ten inches from said plate portion; and said arm portion extends at least two inches beyond said separator post, to provide safe spacing for additional underground utilities in a common trench location.

15 ~~15~~ Claim 4. The ~~insulating~~ wire separator apparatus of claim 21, wherein an outer strengthening rib extends about said main conduit receiving portion of the wire separator apparatus.

Claim 5. The insulating wire separator apparatus of claim 21, wherein the wire separator apparatus is color coded, with a separate color used for each utility.

20 Claim 6. The insulating wire separator apparatus of claim 21, wherein the tracer wire clip portion is located at the distal end of said arm portion.

Claim 7. The insulating wire separator apparatus of claim 21, wherein the opening in the resilient, main conduit receiving portion is from sixty to eighty degrees from the centerline of the main conduit.

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Claim 8. The insulating wire separator apparatus of claim 21, wherein the tracer wire clip finger portion is angled from three to thirty degrees from the centerline of said arm portion, to engage varying sizes of tracer wire therein.

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Claim 9. The insulating wire separator apparatus of claim 21, wherein the main conduit receiving portion comprises an inner radius having first half portion, with a second half portion releasably secured to said first half portion with a releasable fastening means.

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Claim 11. The insulating wire separator apparatus of claim 22, wherein said arm portion extends at least two inches beyond said separator post, to provide safe spacing for additional underground utilities in a common trench location.

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Claim 12. The insulating wire separator apparatus of claim 22, wherein the insulating wire separator apparatus is color coded, with a separate color used for each utility.

Claim 13. The insulating wire separator apparatus of claim 22, wherein the tracer wire clip portion is located at the distal end of the arm portion.

5 Claim 14. The insulating wire separator apparatus of claim 22, wherein the opening provided in the resilient, main conduit receiving portion is from sixty to eighty degrees from the centerline of the main conduit.

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10 Claim 15. The insulating wire separator apparatus of claim 22, wherein the tracer wire clip finger portion is angled from three to thirty degrees from the centerline of said arm portion, to engage varying sizes of tracer wire therein.

15 Claim 16. The insulating wire separator apparatus of claim 22, wherein the main conduit receiving portion comprises an inner radius having first half radiused portion, with a second half radiused portion releasably secured to said first half portion with a releasable securement means.

20 Claim 18. The insulating wire separator apparatus of claim 23, wherein the main conduit receiving portion comprises a first half radiused portion, with a second half radiused portion releasably secured to said first half portion with a suitable releasable fastening means.

Claim 19. The insulating wire separator apparatus of claim 23, wherein the tracer wire clip finger portion is angled from three to thirty degrees from the centerline of said arm portion, to engage varying sizes of tracer wire therein.

5 Claim 20. The insulating wire separator apparatus of claim 23, wherein the insulating wire separator apparatus is color coded, with a separate color used for each utility.

Claim 21. An insulating wire separator apparatus for separating a tracer wire a safe distance from a main conduit in a trench prior to back-filling, which comprises:

- 10 e) a resilient, main conduit receiving portion having an inner radius sized to receive a main conduit portion therein, and an opening sized to flex about said main conduit;
- a2 f) an arm portion extending from the main conduit receiving portion on a side opposite said opening in the main conduit receiving portion, said arm portion extending a safe distance beyond said main conduit receiving portion;
- 15 g) a plate portion extending at right angles from said arm portion in proximity to said conduit receiving portion; and
- h) a tracer wire clip portion having a pair of fingers for receiving a tracer wire therein, said tracer wire clip portion positioned on the arm portion at the end opposite the main conduit receiving portion, to position the tracer wire a safe distance from the
- 20 existing main conduit to protect the conduit from becoming damaged or melted from an accidental electrical charge, or by a lightning strike.

Claim 22. An insulating wire separator apparatus for separating a tracer wire a safe distance from a main conduit in a trench prior to back-filling, which comprises:

a) a resilient, main conduit receiving portion having an inner radius sized to receive a main conduit portion therein, and an opening sized to flex about said main conduit, said main conduit receiving portion with an outer strengthening rib which extends about said main conduit receiving portion of the wire separator apparatus;

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f) an arm portion extending from the main conduit receiving portion on a side opposite said opening in the main conduit receiving portion, said arm portion extending at least six inches beyond said main conduit receiving portion;

g) a plate portion extending at right angles from said arm portion in proximity to said conduit receiving portion;

h) a separator post extending at least two inches at right angles from said arm portion, said separator post spaced at least ten inches from said plate portion to position separate utility lines within a common trench prior to back-filling;

i) a tracer wire clip portion having a pair of fingers for receiving a tracer wire therein, said fingers positioned to extend from the arm portion, midway between the center line of the main conduit and the separator post to position the tracer wire a safe distance from the main conduit to protect the conduit from becoming damaged or melted from an accidental electrical charge, or by a lightning strike; and

said insulating wire separator apparatus is made of a non-conductive, non-corrosive,

non-biodegradable material.

Claim 23. An insulating wire separator apparatus for separating a tracer wire a safe distance from a main conduit in a trench prior to back-filling, which comprises:

- 5 a) a resilient, main conduit receiving portion having an inner radius sized to receive at least one main conduit portion therein, and an opening sized from sixty degrees to eighty degrees from the centerline of the main conduit, said main conduit receiving portion with an outer strengthening rib which extends about said main conduit receiving portion of the wire separator apparatus;
- 10 b).an I-beam arm portion extending from the main conduit receiving portion on a side opposite said opening in the main conduit receiving portion, said I-beam arm portion extending at least ten inches beyond said main conduit receiving portion;
- c).a plate portion extending at right angles from said arm portion in proximity to said conduit receiving portion;
- 15 d).a separator post which extends at least two inches above said arm portion, said separator post spaced at least ten inches along said arm portion from said plate portion;
- e).a tracer wire clip portion having a pair of fingers for receiving a tracer wire therein, said fingers positioned to extend from the arm portion, midway between said separator post and the center line of the main conduit;
- 20 f).the insulating wire separator apparatus made of a non-conductive, non-corrosive, non-biodegradable material; and

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g) said arm portion extends at least two inches beyond said separator post, to provide safe spacing for additional underground utilities in a common trench location, and to position the tracer wire a safe distance from the main conduit to protect the conduit from damage by an accidental electrical charge or by a lightening strike, said tracer wire for alerting the presence of conduit located beneath the ground after back-filling the trench.

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